



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,270	11/23/2001	Kazuo Horikawa	VX012386	2409

21369 7590 06/10/2003

VARNDELL & VARNDELL, PLLC
106-A S. COLUMBUS ST.
ALEXANDRIA, VA 22314

EXAMINER

VAN PELT, BRADLEY J

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,270

Applicant(s)

HORIKAWA, KAZUO

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 2, 6, and 8 (see pg. 8). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 5 is objected to because of the following informalities: line 2, "comprising" should be changed to --comprises--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the intermediate rocking lever link" in line 3. There is insufficient antecedent basis for this limitation in the claim. This limitation is first positively claimed in claim 6, yet claim 7 depends from claim 5.

In claim 8 the limitations "the action transmitting cam groove" in lines 3 and 4, "the inaction transmitting cam groove" in line 4, and "the arcuate cam groove" in lines 4 and 5. All

Art Unit: 3682

lack proper antecedents. These limitations are first set forth in claim 7, yet claim 8 depends from claim 5.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabe (USPN 4,641,545) in view of Choudhury et al. (USPN 4,119,186).

Rabe discloses a lock lever device (10) for a working implement drive control system of a construction machine vehicle (see abstract, harvesters are construction machine vehicles), which comprises a locking lever (12), and a linkage (26) that links the locking lever and the control selector (clutch see column 2, line 53) together, the locking lever and the linkage providing a rocking stroke for operating the locking lever, the linkage including an idle motion stroke mechanism (26) for switching controllable and uncontrollable states at a point of the rocking stroke of the locking lever and for idling between the point of the rocking stroke and a first end point of the rocking stroke of the locking lever;

the locking lever includes an output lever (16); and the linkage includes an intermediate rocking lever link (26) responding to the rocking stroke of the locking lever, and a link rod (32) for transmitting motion from the intermediate rocking lever link to the control selector, and the linkage further includes a mechanism (64) engaging the output lever of the locking lever for pulling or pushing the intermediate rocking lever link between the point of the rocking stroke

and a second end point of the rocking stroke of the locking lever and for idling motion of the intermediate rocking lever between the point of the rocking stroke and the first end point of the rocking stroke of the locking lever;

the mechanism includes a cam pin (64) mounted on the output lever of the locking lever, and an arcuate cam groove formed in the intermediate rocking lever link, the arcuate cam groove receiving and guiding the cam pin of the output lever of the locking lever, and the arcuate cam groove including an action transmitting cam groove portion (60b) corresponding to the rocking stroke of the output lever of the locking lever for transmitting the pulling or pushing action to the intermediate rocking lever link, and an inaction transmitting cam groove portion (72) corresponding to the rocking stroke of the output lever of the locking lever for transmitting no motion the intermediate rocking lever link (26);

the locking lever includes a toggle spring (78) for biasing rocking action along the action transmitting cam groove portion and the inaction transmitting cam groove portion in opposite rocking directions from an intermediate position of the arcuate cam groove.

Rabe does not disclose a control selector lever for switching the working implement drive control system between controllable and uncontrollable states by operating the locking lever, or the idle motion stroke occurs at a midway point of the rocking stroke.

Choudhurry discloses a control selector lever (46), (see column 5, lines 41-44) for switching between controllable and uncontrollable states by operating the locking lever.

To modify the apparatus of Rabe so as to provide a control selector lever would have been obvious to one of ordinary skill in the art in view of the teachings of Choudhurry et al. that

Art Unit: 3682

such an arrangement improves an operation of a clutch mechanism by providing a mechanical advantage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the arcuate groove of Rabe so that the inaction portion occurs at midway point for design functionality, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Response to Arguments

7. Applicant's arguments with respect to claims 5-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bass (USPN 6,050,866) shows that it is well known in the art to provide inaction transmitting grooves in combination with levers, (see fig. 2, (68) remains idle at point C). Also see Yoshimura (USPN 4,924,724) and Brower et al. (USPN 6,047,609).


Application/Control Number: 09/990,270
Art Unit: 3682

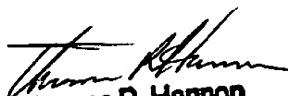
Page 6

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is (703)305-8176. The examiner can normally be reached on M-Th 7:00-4:30, 2nd F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703)308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-9391 for regular communications and (703)305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-2168.

BJVP: 
June 4, 2003


Thomas R. Hannon
Primary Examiner